

Applicant : Claire Hartmann-Thompson  
Appln. No. : 10/694,027  
Page : 2

### REMARKS

Claims 1-20 are pending in the above-identified application. However, claims 11-20 have been withdrawn from consideration. Upon reconsideration and recognition of the allowable subject matter, it is believed that claims 11-20 should be considered for rejoinder into the application.

Claims 1-10 are pending and under consideration in the application.

#### Summary Of Telephonic Interview

Applicant and the undersigned attorney appreciated the opportunity to discuss the claims with the Examiner in a telephonic interview on September 19, 2008. The interview was among Examiner Samuel P. Siefke, Applicant/Inventor Claire Hartmann-Thompson, and the undersigned attorney. Claim 1 was discussed in view of the applied Zheng et al. publication ("X-ray Characterizations of Polyethylene Polyhedral Oligomeric Silsesquioxane Copolymers," *Macromolecules*, 2002, 35).

It is believed that the Examiner was persuaded that Zheng et al. do not disclose a solid particulate filler dispersed in a polymer matrix, but instead disclose a monomer (POSS) that is reacted with ethylene to form a copolymer in which the POSS monomer is covalently bonded to polyethylene rather than dispersed as a solid particulate filler in a polymer.

It is also believed that the Examiner was persuaded that Zheng et al. do not disclose a filler having functional groups capable of interacting with an analyte, but instead disclose POSS monomers that only have inert (non-functional) pendant groups (e.g., cyclopentyl) and groups that are reacted with ethylene (e.g., norbornylene), consumed during polymerization, and are otherwise unreactive and cannot function as analyte sensory groups.

It is the understanding of Applicant and the undersigned attorney that the rejection based on Zheng et al. will be withdrawn, and that a further search will be conducted to determine whether the claims are patentable.

Applicant : Claire Hartmann-Thompson  
Appln. No. : 10/694,027  
Page : 3

Rejection Under 35 U.S.C. §102

Claims 1-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by Zheng et al., "X-ray Characterizations of Polyethylene Polyhedral Oligomeric Silsesquioxane Copolymers."

For the reasons set forth above in the summarization of the interview, it is believed that the Examiner is in agreement with Applicant that the rejection should be withdrawn because Zheng et al. teach requirements for a "filler dispersed in the polymer matrix," or the filler "having functional groups capable of interacting with the analyte."

As suggested by FIG. 2 of Zheng et al., norbornylene functionalized POSS is reacted with ethylene in the presence of a metallocene catalyst to form a copolymer of polyethylene and POSS. As shown in the product formula on the right side of FIG. 2, the resulting copolymer does not include reactive groups or POSS filler that is dispersed in a polymer matrix. Instead, the resulting product is chemically inert and only includes POSS monomers that are covalently bonded to polyethylene chains.

CONCLUSION

In view of the above remarks, it is respectfully submitted that the application is in condition for allowance and notice of the same is requested.

Respectfully submitted,

September 22, 2008  
Date

GJE/dac

/Gunther J. Evanina/  
Gunther J. Evanina, Registration No. 35 502  
Price, Heneveld, Cooper, DeWitt & Litton, LLP  
695 Kenmoor, S.E.  
Post Office Box 2567  
Grand Rapids, Michigan 49501  
(616) 949-9610